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It is noted that in any planning process for community colleges, physical facilities are only an adjunct to the instructional program, and any types of facilities that evolve should be based on the nature of the students, the curriculum, and the general philosophy and operation of the college. A list is presented as a suggested guide for questions to be considered in planning the following components of comprehensive community college facilities--(1) site, (2) buildings, (3) general purpose instructional areas, (4) special purpose instructional areas, (5) drama department, (6) student center, (7) administrative facilities, (8) guidance center, (9) faculty areas, (10) custodial and maintenance facilities, (11) student health facilities, (12) bookstore, (13) library and (14) facilities for evening programs. (FS)

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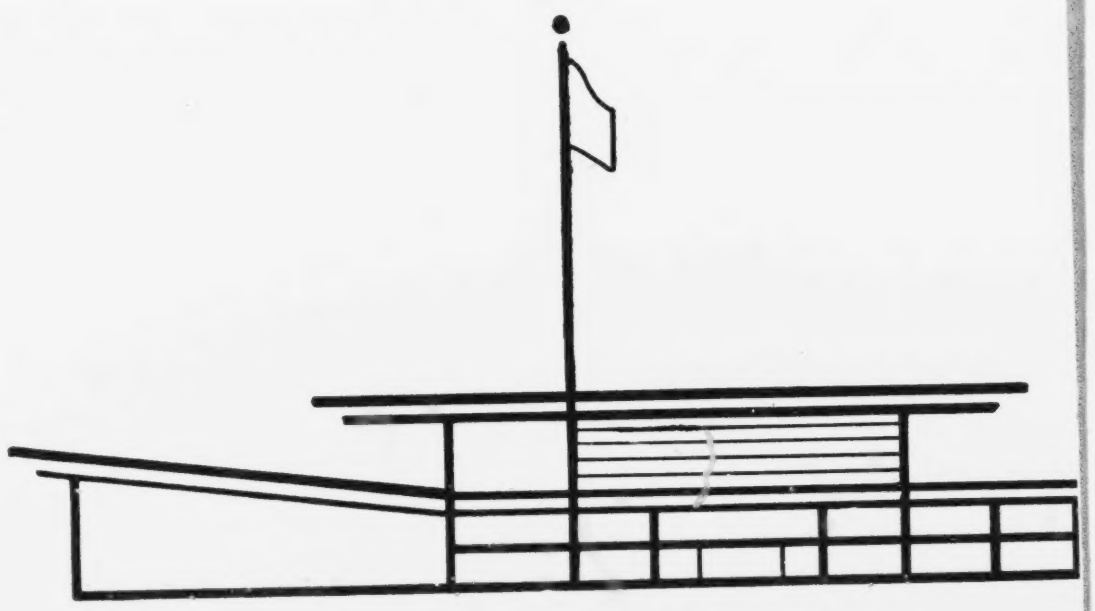
A CHECKLIST FOR PLANNING COMMUNITY COLLEGE FACILITIES



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A CHECKLIST FOR PLANNING COMMUNITY COLLEGE FACILITIES

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COMMUNITY COLLEGES FACILITIES PROJECT
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CHECKLIST FOR PLANNING COMPREHENSIVE COMMUNITY COLLEGE FACILITIES

This list is presented as a suggested guide for questions to be considered in planning comprehensive community college facilities.

The various types of curricula in a comprehensive community college indicate the necessity for close cooperation of instructional personnel, administrators, citizens committees, boards of trustees, architects, and outside school planning consultants to secure functional facilities that will serve the educational program. Although the final responsibility for planning the community college plant rests with the board of trustees and the college administration, it is essential that both lay and professional assistance be sought to plan this unique type of educational plant.

Comprehensive community colleges usually offer three distinct types of programs, but specific course offerings are usually determined by local needs. The three educational programs usually offered are:

1. Transfer (or university-parallel) curricula -- where students select pre-professional and or liberal arts courses for transfer to schools offering the bachelor's degree.

2. Technical curricula -- where students prepare for semi-professional employment in fields associated with industry, business, health, and agriculture. These programs are usually considered terminal, since students frequently enter employment upon graduation.

3. Continuing education programs -- this program is principally for adults seeking education beyond high school. This program enables adults to resume interrupted educational objectives or pursue studies of a cultural or personal enrichment nature. Adults seeking retraining to pursue new occupations or to improve their present job competence might be enrolled in this

area. Such programs might not vary markedly from the regular transfer or technical curricula.

Although the objectives of these curricula are widely recognized and generally accepted, each college has the responsibility for determining its own specific objectives. The degree of emphasis will vary from college to college in accordance with the educational needs of the geographic area it serves.

It should be remembered that in any planning process for community colleges, physical facilities are only an adjunct to the instructional program. Any types of physical facilities that evolve should be based on who is to be taught, what is to be taught, how it will be taught, when it is to be taught, and how this space can best serve and arrive at the teaching objectives that are a part of the school's philosophy. Unless the proper physical facilities are constructed, the scope of the program and the operation of the college will be handicapped.

PLANNING THE COMMUNITY COLLEGE SITE

Selecting a site for a proposed community college can be one of the most important decisions in planning. Whether the college is to be located in an urban, suburban, or rural setting; its location, size, and distinguishing characteristics will influence present and future development as well as the types and aesthetics of the facilities planned. Certain decisions regarding instruction and student policies will be determined by the site selected. The importance of site selection cannot be over-emphasized. Site selections should be based on such considerations as utilization, master plan developments and improvements expected, rights-of-way, accessibility, environment, size and shape, topography, soil and drainage, zoning, and nearness to essential services such as sewers, electricity, water and gas.

The following are examples of typical questions that might be asked and should be answered before selecting or planning a comprehensive community college site.

1. At what time in the planning stage should site selection be considered?

2. How close to the center of population should the site be?

3. How does the college philosophy affect the size of a campus?

4. What formula should be used to determine the size for a community college site?

278. How much space is required for each area in the college bookstore?

279. Should space be calculated on the square foot basis or should it be determined by the number of students enrolled in the college?

280. What provisions should be made for built-in controls to offset pilfering of supplies?

PLANNING THE COMMUNITY COLLEGE LIBRARY

281. How is the community college library function different from that of the high school or four-year college?

282. What types of services and materials should be available in the community college library?

283. Where should the library be located?

284. What figure should be used in determining square footage?

285. Is outside parking near the library desirable?

286. What should be the seating capacity of the library?

287. What plans should be adopted for future expansion of the seating capacity?

288. What type of furniture is most desirable and how should it be arranged?

289. What proporation of the reading surfaces should be carrels and where should they be located?

290. How should the number of volumes in a library be determined?

291. What provisions should there be for future expansion of the book capacity?

292. What provisions should be made for the expansion of the library?

293. What types of special study areas, materials and equipment should be provided for the vocational-technical programs?

294. Should the special equipment, materials and services for the vocational-technical programs be separate from the others?

295. What special facilities should there be for instructional staff use?

296. How many volumes, recordings, tapes, films and slides should be housed in the library and how many copies of each?

297. How many periodicals and trade journals should be recommended?

298. How should these be displayed?

299. How can traffic within the library be controlled?

300. How should materials be transported within the library?

301. What types of stack areas are most desirable and where should they be located?

302. How should stack areas be arranged?

303. Should book stacks be movable?

304. Should book stacks have lighting fixtures attached?

305. How much shelving should be required in a library?

306. What are the most common depths of shelving?

307. How long should the library day and week be?

308. What types of audio-visual centers for use by individuals and/or groups are most desirable?

309. Where should these audio-visual centers be located?

310. How much space should be devoted for student audio-visual use?

311. How many listening stations should be provided for audio-visual use?

41. What type of landscape program should be initiated?

42. What provisions should be made on or near the campus site for bus transportation?

PLANNING COMMUNITY COLLEGE BUILDINGS

The following are examples of typical questions that should be posed before planning the buildings that are to be constructed on a community college site. Any questions asked should keep the ultimate size of the community college in mind.

43. What basic buildings must be on every community college site?

44. What building(s) should be constructed first if you are forced to build only one or two at a time on a new campus?

45. What building should be kept apart from the rest of the complex?

46. Should academic departments be housed in separate buildings?

47. Should there be certain zones for certain types of buildings (example: administrative zone, instructional zone, parking zone) to allow for added expansion or addition of certain types of facilities?

48. What plan (compact, cluster, finger, campus, etc.) is the most desirable for the physical plant of the college?

49. What is the most desirable orientation of certain buildings to each other?

50. What type of orientation pattern is the most desirable?

51. What are some of the dangers in the orientation of buildings?

52. What is a way to prevent "boxing-in"?

53. What should be the basic orientation of the buildings with regard to sunlight?

54. How should the insides of buildings be designed for flexibility?

55. Where should folding partitions be used to make space flexible?

56. What provision should be made for rearranging of space?

57. What is the most desirable orientation of buildings in an "inner-campus" located on a small site?

58. How is the noise that emanates from the surrounding area controlled on an "inner-campus"?

59. How is the open core utilized in an "inner-campus"?

60. Where are the athletic fields placed in an "inner-campus"?

61. Are enclosed walkways between buildings necessary?

62. Are patios desirable between buildings? If so, what should be their function and what should they look like?

63. Should ramps or stairs be considered for the entrances into buildings?

64. What buildings require loading docks?

65. What buildings should have dumb-waiters or freight elevators?

66. Are separate heating systems more desirable than central heating systems? Why?

67. What facilities should be available for use by community organizations?

68. How much window area is desirable in buildings?

69. What "rule-of-thumb" figure should be used for determining lounge spaces?

70. In what buildings should lounges be provided?

71. What types of building facilities are necessary for the outdoor maintenance program?

72. What types of telephone services are required for intra-campus communication?

73. Should service lines within buildings be planned for future expansion, even though, at the time of construction, no expansion is planned?

74. Should all areas have separate heating and air-conditioning controls?

75. What facilities on the campus should be air-conditioned? (List in order of importance.)

76. Is a public address system essential to a community college?

77. Should there be a bell system for the entire campus?

78. Are control clocks necessary?

79. What areas should have clocks?

80. What special provisions should be made in facility planning for the evening program?

81. Should building exteriors be illuminated at night?

82. What areas on the campus should be fenced?

83. Where should public telephones be located?

84. Where should vending machines be placed on the campus?

85. What type services should they offer?

86. Where and in what building should smoking be allowed?

87. Can corridors be used for other purposes?

88. Should parking guards be employed? If so, how many?

89. How can parking lots be controlled by built-in devices?

PLANNING COMMUNITY COLLEGE GENERAL PURPOSE INSTRUCTIONAL AREAS

Community college instructional spaces are of two categories, (1) general purpose instructional areas, and (2) special purpose instructional areas. Special purpose instructional facilities have a unique role since they are usually designed with a specific teaching-learning situation in mind. The general purpose instructional areas are much more flexible and can be used to teach a variety of subjects. The questions listed below should be answered before planning the general purpose instructional areas which will be used for some of the following subjects:

English
Science Theory
Economics
Psychology
Geography
Law
Art Theory
History
Education
Engineering Theory
Shop Theory
Speech
Mathematics
Sociology
Anthropology
Foreign Languages
Programming Theory
Health
Political Science
Literature
Business Administration
Business
Music Theory

90. Should there be provisions for small and large group instruction?

91. Should small general purpose instructional rooms with a maximum capacity of fifteen students be programmed?

92. What subjects can be taught in these areas? List.

93. What should be the ratio of small areas to large areas?

94. If classrooms are of varied sizes, what should be the typical capacity of each of these varied types of classrooms?

95. What are the suggested sizes for these instructional spaces?

96. How do you arrive at the recommended sizes of the various types of general instructional areas?

97. Should the type of student seating purchased make a difference in the size of instructional spaces?

98. What type of student seating should be considered in making these estimates?

99. What formula should be used to determine the number of general purpose classrooms required?

100. Where should general purpose instructional areas be located?

101. What changes in the types of classroom seating are needed?

102. How much display area (chalkboards, pegboards, tackboards, etc.) is necessary for general purpose instructional areas?

103. What formula should be used to determine the number of specialized instructional spaces?

104. What should be their utilization factor?

105. Should it be the same for small and large areas?

106. Are Heidelberg lecture halls recommended?

107. What kind of storage spaces are required in the different types of instructional areas?

108. What provisions should there be for audio-visual aids?

109. What special color treatment is recommended for these areas?

110. What types of mechanical services (plumbing, heating, air-conditioning) are needed for these instructional rooms?

111. What special electrical requirements, such as outlets and special lighting, should be considered? Where located?

112. What facilities will be used for just one type of activity, or more than one?

113. What facilities can simultaneously be used by more than one group?

114. What provisions for future expansion of instructional areas should be considered?

115. What provisions for flexibility in instructional areas should be considered?

116. Should racks or cloak rooms be provided for coats and hats?

117. What type of regular classroom facilities or laboratories requires library corners for ready reference?

PLANNING SPECIAL PURPOSE INSTRUCTIONAL AREAS FOR THE COMMUNITY COLLEGE

Special purpose instructional areas differ markedly in physical appearance and function, but basically the same questions can be asked in order to determine their different characteristics.

The questions listed below should be answered in planning the following types of special purpose instructional areas:

Art laboratory (ceramics)
Art laboratory (drawing)
Art laboratory (painting)
Art laboratory (sculpture)
Art laboratory (crafts)
Foreign language laboratory
Reading laboratory
Journalism laboratory
Photography laboratory
Instrumental music room
Choral music room
Accounting room
Bookkeeping room
Typing room
Office machines room
Data processing laboratory
Physical Education facilities
Home economics laboratory
Biology laboratory
Botany laboratory
Bacteriology laboratory
Anatomy laboratory
Geology laboratory
Zoology laboratory
Physics laboratory
Chemistry laboratory
Organic chemistry laboratory
Surveying laboratory
Drawing laboratory
Engineer testing laboratories
Glass tech. laboratory
Tele-communications laboratory

118. What subjects will be taught in these areas? List.

119. Can regular classrooms, seminar rooms, and large group areas be used for these subjects?

120. Where should vocational-technical areas be located?

121. Where should this specialized instructional area be located in relation to the other facilities on the campus?

122. What formula should be used to determine the number of these?

123. In what building(s) should these specialized facilities be placed?

124. Next to what other department should this area be located?

125. Can this facility be shared by other departments?

126. Can this special facility be used by (1) technical-vocational, (2) university parallel, and (3) general subjects?

127. Can it be used or adapted to the evening program?

128. What figure should be used to determine the square footage of this area?

129. What is the pupil capacity of this area?

130. What is the approximate utilization factor of this area?

131. What types and sizes of other special rooms are necessary to supplement this area?

132. What "rule-of-thumb" figures should be used to determine their square footage?

133. If a laboratory, should it have a special lecture area?

134. If a laboratory, how should lecture area be separated from the work area?

135. If a laboratory, what type of special electrical services are recommended (distribution panels or portable units)?

136. What types, sizes, and number of storage spaces should be provided? Should they be built-in, movable, or both?

137. What should be the ceiling height of this area?

138. Is a direct outdoor exit essential?

139. Is a special size and type of door necessary?

140. What type of hardware should be considered?

141. How much display area (chalkboard, tackboard, etc.) is necessary?

142. What type and intensity of lighting is recommended?

143. Will dimmer controls be required for lighting?

144. What other special type of other lighting is necessary?

145. What types of electrical services (outlets, voltage demands, etc.) are needed? Where should they be located?

146. How much fenestration is necessary in this area? What type, if any, should it be?

147. What provisions should be made for audio-visual aids?

148. Is complete "blackout" essential?

149. What special color treatments are recommended?

150. What type of plumbing services are required?

151. What type and volume of ventilation is required?

152. What type of special exhaust ventilation is essential?

153. Should this area be air-conditioned?

154. What other type of essential service lines will be required?

155. Should provisions be made to expand service lines?

156. How can additional service lines be installed after the building is completed since lines are normally imbedded in the floors and walls?

157. What type of temperature controls are necessary?

158. What types of furniture and or fixed equipment should be provided?

159. How should it be "laid out"?

160. Should individual lockers for student projects or personal items be provided?

161. Should there be racks for coats and hats?

162. What special acoustical properties are essential?

163. What special ceiling, wall and or floor properties are recommended?

164. Should a separate area be required for resource materials?

165. Should movable partitions be provided?

166. Should smoking be permitted?

167. What important safety factors must be considered in planning this area?

168. What special structural considerations should not be overlooked?

169. Should drinking fountains be provided within this area?

170. Should toilet rooms within this area be considered?

171. Should faculty offices within this area be considered?

172. How does this area differ from its counterpart on the high school or four-year college level?

173. Should parking facilities be directly adjacent to this area?

174. What other types of special purpose areas which are not included in the list should be planned?

PLANNING THE COMMUNITY COLLEGE DRAMA DEPARTMENT

In planning the drama department, the same questions that are listed in the previous section entitled, "Planning Special Purpose Instructional Areas for the Community College," should be asked. In addition, the following questions should be asked because of the specialized nature of the facilities.

175. What types of stage facilities are necessary?

176. Where should they be located?

177. What is the desirability of the various types of stages?

178. What is the desirable size of these stages?

179. Should the college have an auditorium and/or a little theatre(s)?

180. What type of audience seating should be provided for the various types of stages?

181. What should be the audience seating capacity of these areas?

182. What types of instructional spaces make up the drama department?

183. How many locations on campus should be provided for dramatic productions?

184. Where should they be located?

185. Should the college auditorium be managed by the drama department?

186. What is a "rule-of-thumb" for seating capacities for the community college auditorium?

PLANNING THE COMMUNITY COLLEGE STUDENT CENTER

187. What are the purposes to be served by this facility?

188. Where should the student center be located?

189. What are the types and sizes of areas that are needed to accommodate the services of the center?

190. Should all of the student lounges be located in the student center?

191. What provisions for student government offices should be considered?

192. What other types of offices should be located in the student center?

193. Should the student cafeteria and snack bar be located here?

194. Should the student cafeteria be in one large room?

195. Is a separate snack bar and cafeteria hot tray areas necessary?

196. Should all vending machines be located in the student center?

197. What types of provisions for serving meals should be considered (lunches, snacks, banquets, full-course dinners, etc.)?

198. What is the best type of hot tray service area?

199. Should there be separate faculty dining rooms in the center?

200. Should a separate faculty dining area be located in the student center?

201. Should the faculty use the same service lines as students?

202. What other type of dining facilities should be in this area?

203. How long should food service facilities be available to accommodate the evening program students?

204. What types of display areas should be located in the student center?

205. In designing the student center, what area should be given careful attention?

206. How should lounge furniture be placed?

207. Where should each functional area of the student center be located in relation to the others?

208. Are music listening booths, little theatres, T-V rooms, and game rooms part of the center's facilities? If so, where should they be located and what size should they be?

209. Should there be special provisions for parking and servicing the student center?

210. What administrative and operational offices should be located in the student center?

211. Can the student center be used for part of the instructional program?

212. Should any general purpose or special purpose instructional areas be located in the student center?

213. How can the student center be used in conjunction with the art and drama departments?

214. Has provision been made for student lockers or mail boxes for both day and evening programs?

215. What other storage areas are necessary in the student center?

216. Should the student center have study areas?

217. Are game, television rooms and music listening booths part of the student center?

218. What other special services or considerations should be given to the student center?

PLANNING THE COMMUNITY COLLEGE ADMINISTRATIVE FACILITIES

219. Where on the campus should the administrative facilities be located for the most efficient service?

220. For which administrators are individual offices needed?

221. What should be the size of the individual offices?

222. What conference rooms are needed in this area?

223. What conference rooms should be located in the administrative areas?

224. What should be the size of the conference rooms?

225. Should there be special facilities for registration for both day and evening programs?

226. Should there be a separate waiting area?

227. Should there be special facilities for storing records?

228. What type of communications system should be provided?

229. What types and sizes of spaces are required by the clerical staff?

230. What other spaces are needed for this area?

231. What size should they be?

232. Where should they be located?

233. What are some other factors that should be considered in planning the administrative area?

PLANNING THE COMMUNITY COLLEGE GUIDANCE CENTER

234. Where should the guidance facilities be located for maximum efficiency?

235. Who should have offices in the guidance center?

236. What size and types of offices and conference rooms should be located in this area?

237. What special areas should there be for counseling and testing?

238. What types and size of space are required by the clerical staff?

239. Should there be a separate area for record storage?

240. What other facilities are needed for this area?

241. What size should they be?

242. Where should they be located?

243. Should there be separate parking for the guidance facilities?

244. Who should be authorized to use these parking facilities?

PLANNING THE COMMUNITY COLLEGE FACULTY AREAS

245. What provision should there be for faculty offices?

246. What should be the size of the faculty offices?

247. What is the purpose of each faculty member having an office?

248. Do all faculty members need similar space?

249. What difference, if any, would there be in the size of certain faculty member's office space?

250. Where and how should faculty offices be located? (Near the teaching station, by department, etc.)?

251. What are the functions of a faculty center?

252. What are some advantages of a separate faculty center?

253. What are some important factors that should be considered in designing the faculty center?

254. Are mail boxes or offices provided for both day and evening faculty members?

255. Where would space for clerical personnel be located in or near the faculty offices?

256. Should separate department libraries be established? If so, where and what size?

257. Should there be office space for part-time evening instructional staff?

258. What are some other areas on the campus required by the faculty?

PLANNING THE COMMUNITY COLLEGE CUSTODIAL AND MAINTENANCE FACILITIES

259. Where should the main maintenance facilities be located?

260. Should office space be provided for the maintenance staff?

261. What space provisions should there be for the maintenance and repair of equipment?

262. What should be the size of these areas?

263. What types and sizes of storage space are necessary for the custodial and maintenance staff?

PLANNING THE COMMUNITY COLLEGE STUDENT HEALTH FACILITIES

264. Where should the health suite be located with reference to other campus facilities?

265. How extensive should be the services that are offered?

266. What types and sizes of areas should be provided for health services?

267. What should be the function of the special spaces in this area?

268. Should there be special provisions for parking near the health service center?

269. Should the health suite be included in the special facilities provided for a program in nursing?

270. What facilities can be used by both?

PLANNING THE COMMUNITY COLLEGE BOOKSTORE

271. Where is the most desirable location for the community college bookstore?

272. What type of operation should be considered (self-service or traditional)?

273. What types of items should be stocked?

274. What type of special lighting and services should be considered in this area?

275. Should the bookstore have a loading dock?

276. What are some of the other special services that should be provided by the bookstore?

277. What are some of the other basic facilities found within a college bookstore?

5. How may future size of site needs be projected?

6. When should additional site(s) be purchased?

7. What should be the minimum full-time enrollment of a comprehensive community college?

8. What should be the maximum full-time enrollment of a comprehensive community college?

9. What is the best shape for a community college site?

10. What will happen to the value of real estate surrounding the community college?

11. Should community colleges be located in industrial areas?

12. What are considered the best "neighbors" of community colleges (private housing, churches, business districts)?

13. Should certain zoning regulations be adopted before the site is selected?

14. Where should play areas be located?

15. What essential outdoor areas must be considered in a community college campus?

16. What should be the relationship of buildings to the site?

17. What percentage of the site should be covered by buildings?

18. Where should parking lots be located?

19. What formula should be used to calculate the number of spaces needed?

20. Should there be separate parking lots for faculty and staff?

21. Should there be special parking facilities for visitors? If so, where and how many spaces?

22. Should there be special spaces for compact cars?

23. How can the "mass effect" of many cars in the parking lot be made more aesthetically desirable?

24. In urban areas, where can students park while attending classes?

25. Should parking lines be spaced at 45^{o} angles?

26. What building should be directly accessible to private cars?

27. Should parking lots be illuminated at night? If so, to what degree?

28. Where should the luminaires be located?

29. Should vehicular roads, other than service roads, be allowed among the buildings?

30. What should be the width of the service roads?

31. Can service roads also double as student walks?

32. What should be the width of the access roads? Where should they be located?

33. What should be the nature of the topography?

34. Is seepage and flooding from nearby areas a problem?

35. What should be the nature of top soil and sub-soil?

36. Should certain trees be fenced off before construction begins to save them from destruction?

37. What should be the width of the main student walks?

38. What are some of the main sources of noise that are disturbing to the instructional program?

39. What acoustical barriers should be considered in site selection?

40. What consideration should be taken to cutdown on wind exposure?

312. Should the number of audio-visual spaces be determined by the number of students enrolled?

313. What other types of audio-visual services should be rendered by the library?

314. Should there be a darkroom in the audio-visual area?

315. How many student conference rooms should be located in the library?

316. What should be their size?

317. What type and size of typing areas should be located in the library?

318. What "rule-of-thumb" can be used for computing the amount of spaces required for conference rooms and typing areas in the library?

319. What should be the size of the staff and what type of personnel should they be?

320. Where should these personnel be located in the library?

321. What areas of the library should be open to students?

322. Should there be a separate student lounge or should lounge furniture be provided in reading areas?

323. Should the library have movable partitions and, if so, why?

324. What provision should there be for glass partitions?

325. Should faculty carrels or cubicles be provided?

326. Are lockers necessary for storage of materials before students enter the library?

327. Should there be provisions for vending machines? If so, where should they be located?

328. Should there be a classroom for teaching the use of the library?

329. What safeguards should be provided to prevent furniture from being burned by cigarettes?

330. What provisions should there be for hanging coats and hats?

331. Should there be a separate professional library and a reading area?

332. What type of offices and processing centers are desirable and where should they be located?

333. What should be the size of these areas?

334. Where should the main circulation desk be located and why?

335. How long should the main circulation desk be?

336. What built-in controls to avoid pilfering should be considered?

337. Where should receiving areas for materials be placed?

338. Where should library supplies and equipment be stored and in what types of storage spaces?

339. Should public telephones be located in the library?

340. Should there be separate areas for special collections?

341. Where should switches be located?

342. What types of services (water, gas,electric, etc.) should be provided for the library?

343. What types of custodial services are essential and where should they be placed?

344. What provisions should be made for acoustical controls?

345. What types of floors are most desirable?

346. Is it more desirable to have a shipping elevator, a passenger elevator, or a dumb-waiter?

347. What formula should be used to determine the amount of square footage in the community college library?

PLANNING FACILITIES FOR THE COMMUNITY COLLEGE EVENING SCHOOL PROGRAM

348. What special consideration should be given to facilities because of the evening program?

349. Should the entire evening program be operated on the community college campus?

350. At what hours should certain facilities be open to house both day and evening programs and what should these facilities be?

351. What mechanical considerations, such as lighting, ventilating, etc., should be adapted to house an evening program?

352. How much outdoor illumination is necessary and where should it be placed?

353. How much parking is necessary for operating the evening program?

354. What custodial services should be available during the evening program?

355. Can facilities for the evening program only be justified? If so, what facilities?

356. What should be the educational environment for a comprehensive community college?